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By The House Committee on Administration

STATEMENT OF :

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BEFORE THE HOUSE COMMITTEE ON ADMINISTRATION

June 9, 2005

Thank you Mr. Chairman and members of the committee for this opportunity to appear before the House Committee on Administration. My name is Colin Coxall and I am the Strategic Security Advisor of Capita Symonds Group, Ltd, a London based security technology and investment firm. We are pleased to appear today to present evidence relating some of the methods used in Great Britain to counter the threat of terrorism and major crime in our cities.

The Committee may wish to be reminded that for many years the United Kingdom has faced the reality of a sustained attack from terrorists of the Irish Republican Army (IRA). For over 20 years, the UK faced horrifying attacks and bombings, including a direct and major bombing attack on our democratically elected Government. You may also recall, that one of those bombing attacks took place whilst our Government was meeting in a hotel conference centre at the Grand Hotel in Brighton; resulting in death and serious injury of some of our political leaders. Worse still, the attack was aimed at assassinating our Prime Minister, Margaret Thatcher.

Later there was a mortar bombing attack on Downing Street whilst our Government was meeting. Massive damage was caused to Government buildings in the vicinity, which could so easily have resulted in the assassination of our Prime Minister John Major and our Government.

In 1993 the IRA terrorists directed their attack on the City of London, which is the financial centre of our Capital. Over the period of approximately one year three 2-½ ton truck bombs were placed by the IRA into the centre of the City causing death, injury and great damage to buildings and our financial Capitals business infrastructure.

This sustained level of terrorist bombing by the IRA caused deep concern to our Government and the Police as its continuance would have caused great damage to the financial future of our nation.

Response to Threat

In recognition of the significant threat to the business district of London, and the premier financial centre in Europe, a robust response was required. The response was multifaceted and comprised the following key elements:

- Strengthening threat analysis to reinforce intelligence led approach to policing
- Strengthening communications across agencies
- Providing technological systems that support intelligence gathering
- Provision of cordoned zone to restrict vehicles entry to sensitive areas
- Installation of real time alert systems comprising
    - Closed Circuit TV (CCTV)
    - Automatic Licence Plate Recognition systems (ALPR)
    - Fast track communications with central databases
- Deployment of police staff at checkpoints
- Training of staff at control centre to deal with threat and consequences
- Contingency plans for full scale alert that may arise from information from technological systems deployed.

- Focus on continuing development of systems, linkage with wider database systems, and growing the areas covered by the technology.

The premise that prevention is a better cure is central to the approach the UK government and its agencies took when dealing with the threat to London and consequently the wider UK economy. The acquisition and rapid dissemination of intelligence gathered from multiple and varied sources was vital when coupled with an appropriate response plan.

Having analysed the threat, it was clear that local quality intelligence was required concerning vehicles that could pose a danger to the City of London community. Vehicles were deemed the major threat due to their ability to carry large volumes of high explosives that could, upon detonation, devastate a large area of the city. Detecting vehicles, which through their association with other crimes or individuals associated with major crime and terrorism, was central to the containing the threat.

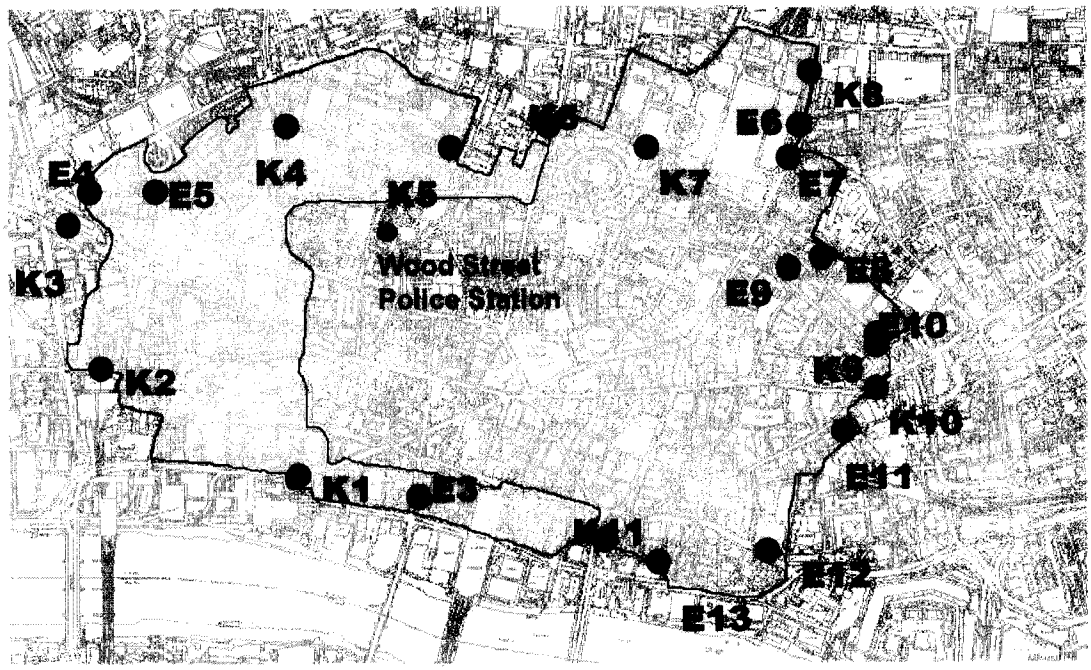
The Solution

The immediate response in the City of London was to deploy a sophisticated vehicle tracking system that could identify vehicles in real time and alert officers located in the control room as to a possible terrorist threat. The system was to be based on Automatic Licence Plate Recognition (ALPR) with high speed links to local and remote databases.

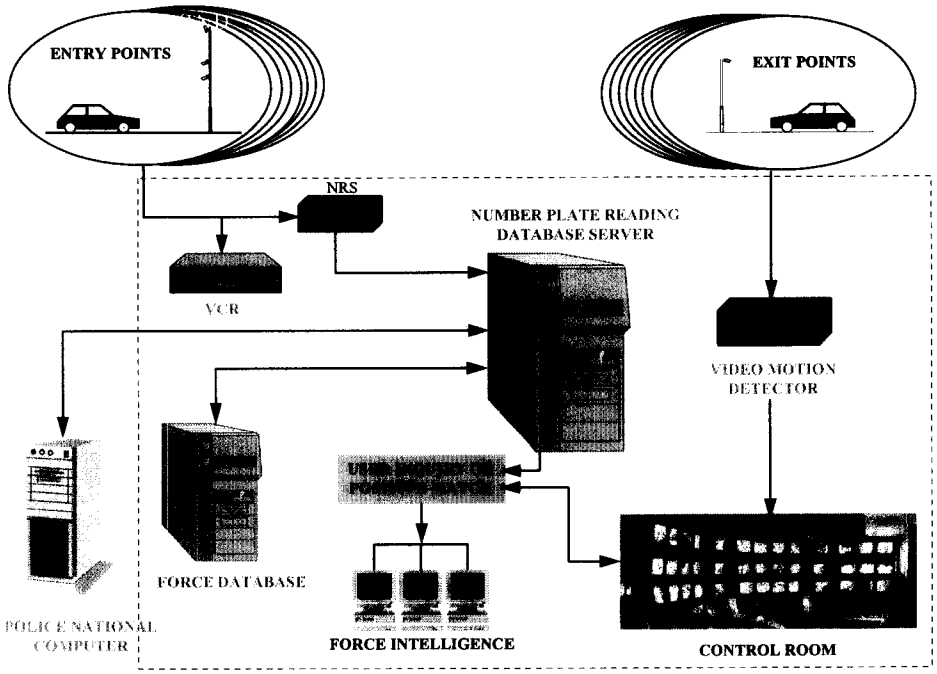
The key benefit this solution could offer was the near instantaneous identification of a vehicle through the automatic recognition of a vehicle licence plate that, in turn, delivered specific information concerning that vehicle to police officers. This type of solution enables authorities to assess what type of response needs to be made such as apprehension, isolation of the vehicle, or evacuation of the area or other appropriate response.

The System

The system comprises a series of cameras deployed around a cordoned area of the City of London. The identification of the area to be cordoned off was based on a number of factors, not least of which were the location of key institutions and iconic buildings that needed protection. The area comprises approximately 1.0 square mile into which 11 entry points were established and 13 exit points.



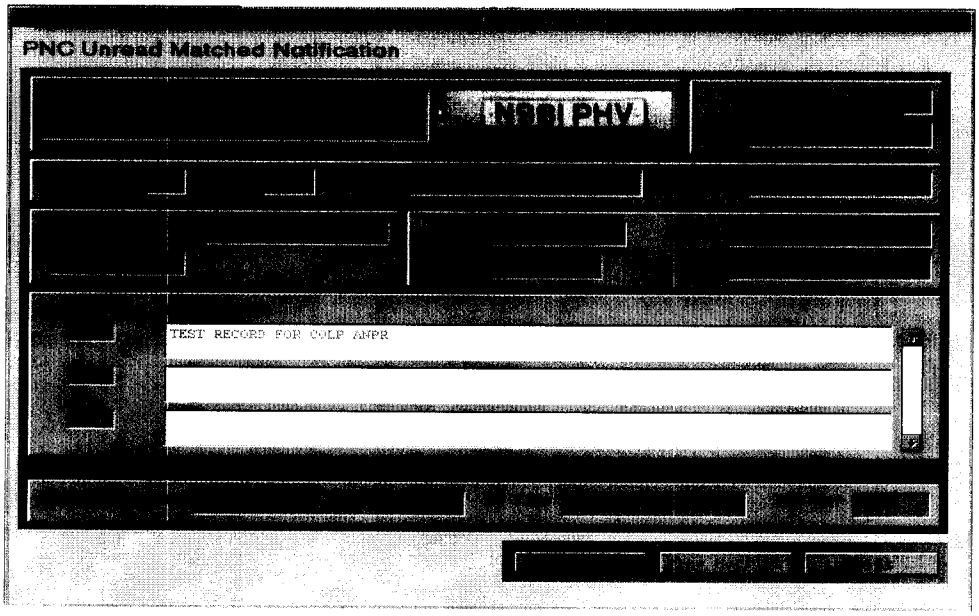
At each entry point the highway layout was amended to force vehicles to slow down and allow Police officers to interview occupants if necessary. At each of these locations a series of high performance cameras were deployed along with specialist lighting. The cameras systems allowed a clear view to be obtained of each vehicle and its occupants.



The cameras are linked to the Force headquarters and control room via a dedicated resilient fibre optic network to minimise any downtime or possibility of sabotage. The information and images transmitted by the cameras are used to read the licence plate using an automated process. The index number is then matched on the Police National Computer. Should a match occur, specific information is delivered to the police control room. This may include:

- Make and colour of vehicle
- Owner
- Links with crime
- Other intelligence concerning the vehicle that could be of a highly sensitive nature.

This information is available to Officers in **less than 4 seconds** from the vehicle passing the camera. In addition a match process takes place on local databases within the City of London where known vehicles linked with terrorists are recorded.



Other Benefits

Extensive reporting facilities are provided and enable vehicle trend logging, violation logging, and system performance monitoring. Each of these enable and promote effective management, bringing further benefits such as improved police efficiency and the greater ability to monitor and identify criminals and possible terrorists. Other features include:

- Multi-camera input.
- Multiple database matching.
- Rapid end to end performance with remote databases.
- Instant data retrieval for up to 365 days.

- Full database interrogation tools.
- Full system diagnosis and event logging.
- Automatic backup facility.
- Police National Computer connectivity.
- Manages mobile ANPR systems.
- Automatic Data Housekeeping.
- Plate patch presentation.
- Remote pager notification

Outcomes

The system provides a highly valuable tool to those charged with protecting the City of London from further terrorist attack. Indeed since its deployment no further terrorist attacks have taken place in the City of London. Other benefits have been a measurable reduction in major crime and an increase in detection of major and minor crimes.

Further terrorist attacks have taken place in London, but outside the City of London. A major event took place in Canary Wharf, the second financial district in London. Following this event, a similar system was deployed around this second area. Again, no further incidents have occurred.

Such has been the success of the system that an ALPR system implemented for the London Congestion Charge, comprising of some 300 cameras, now covers the centre of London and provides further information for the Police Services in London.

The underlying objective of the UK police service is to deny criminals the use of the roads. ALPR has a major part in meeting that objective. Since the implementation of the City of London Police System there have been significant developments and expansion in the use of ALPR across the UK.

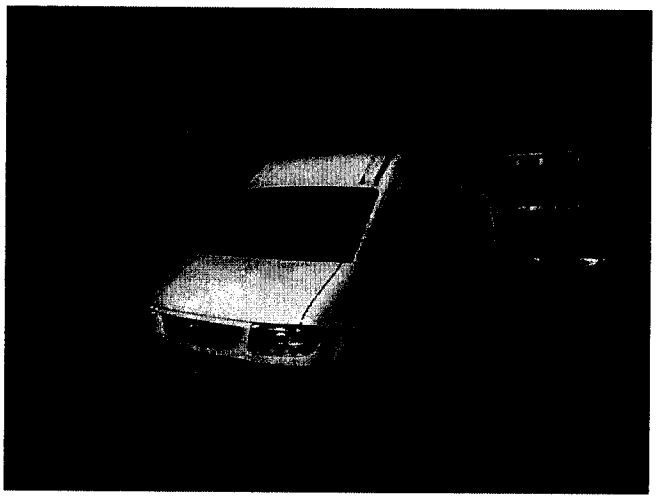
Capita Symonds has supported the UK police service on the deployment of technologies to assist with policing ports of entry into the UK, and has an ongoing commission to provide technical support at all UK ports and airports. The systems at ports have a fundamental impact on national security and on the success factor of inter-networking between systems. This now forms a major part of our work.

Capita Symonds has also supported the UK government in the strategic development and deployment of the technology beyond the initial charter. This significant piece of work has established a robust framework against which all police forces in England and Wales must build their own strategies.

Throughout the period 2002/03 the Home Office led a project to deliver an ALPR capability to every force in England and Wales. This project (Spectrum) provided an infrastructure that would enable centralised ALPR data management and

the opportunity for data exchange in a secure and timely manner. Since it's commissioning, Spectrum has significantly raised the profile of ALPR in the UK and it has clearly demonstrated the effectiveness of the technology. Independent trials and analysis have proven that the arrest rate of an ALPR enabled officer is 10 times that of his non-enabled counterpart.

Mobile ANPR CAPITA SYMONDS



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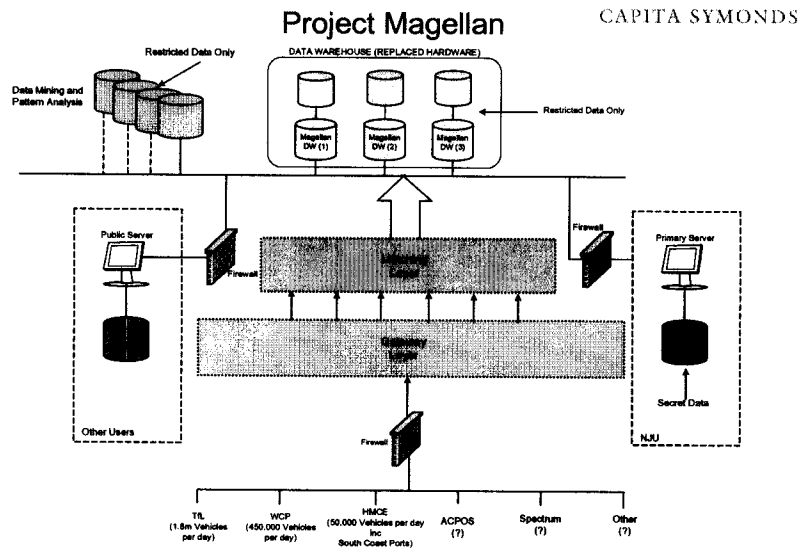
Following completion of the trial, the UK government is now wholly committed to the widespread deployment of ALPR and allied technologies. Such deployment will be in accordance with the UK National ALPR Standards, as developed by Capita Symonds. This document sets the technical, managerial and operational objectives and criteria for ALPR procurement. It is against the requirements set out in this document that all police owned ALPR assets must comply.

Since 1998 Capita Symonds has been providing technical support and project management to the UK Home Office under the National ALPR Data Centre (NADC). This presents represents both a significant undertaking and commitment by the UK Government. The system is currently being developed from its current pilot status to a production environment. The NADC will deliver the following:

- National facility to store up to 50 million reads per day
- National user access
- National repository for vehicles of interest
- Enhanced data mining analysis capability
- Total secure environment



It is proposed that every ALPR reader deployed by the UK Police Service will provide a real-time data feed to the NADC. Authorised users will have the ability to post vehicles of interest on NADC. In the event that such a vehicle of interest is read anywhere across the UK, then the 'hit' information will be delivered to one or more users within 3 – 4 seconds. On a national basis, police users will have the ability to search NADC for post-incident analysis.

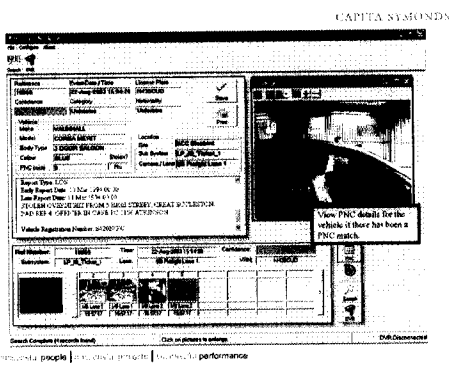
NADC may be used by a variety of law enforcement agencies, each with its own objectives for system success. The overall success factor of the system will depend on maintaining the integrity of each stakeholder's data and interest. Capita Symonds has focussed on ensuring that the installed technology will alert the 'Centre' in the event that 2 or more stakeholders declare an interest in the same vehicle.

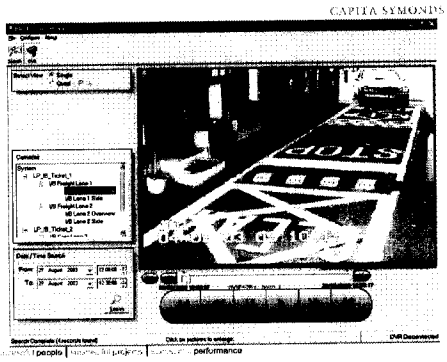
Beyond March 2006, it is anticipated that there will be significant system expansion to accommodate additional data feeds with feature rich functionality and integration with other police intelligence systems.

Capita Symonds also provides technical consultancy and related services to the UK Home Office Police Standards Unit on new and emerging technologies, where these are thought to enhance the overall objectives for ALPR. An example of this is the concept of e-Plates which encompass an electronic chip buried in the fabric of a licence plate. The chip emits a pulse every two milliseconds containing the vehicle identification number. This development is a significant step forward for monitoring UK motorcycles. E-plates are seen as a complimentary technology to ALPR and not a replacement for it.

Our work with Home Office has also addressed the integration of ALPR with CCTV imaging, with the objective of identification and recognition of vehicle make model and colour and obtaining images of driver and front seat passengers. Such integration has resulted in establishing fully digital solutions that will form the basis

of data exchange across the UK in the future. An example of such a user interface is included in the series of screen shots below, as deployed at certain classified locations.





This system allows the full image sequence of any vehicle of interest (or any vehicle that has been read) to be instantly replayed with any ALPR hit data. This system is a major technological advancement over previous systems as it allows full portability and remote accessibility of data. When the NADC infrastructure is established in 2006, it will be able to integrate with the video streams discussed above. In principle, any vehicle of interest that has previously been read and contains a digital image sequence associated with it, will be viewable by any authorised user nationwide. Ultimately, NADC will be the means by which this is achieved.

In summary, the UK leads the way in its use of technology to combat homeland terrorism. Capita Symonds is proud to have provided the strategic vision and solutions that allow UK Police service to meet its stated objectives of providing the very highest protection to it's citizens.

The effectiveness of ALPR is now without question. However, the technology is only as effective as the intelligence sources that sit behind it. The UK has adopted the approach of 'joined up' intelligence and data sharing which has allowed the law enforcement community to deliver the highest value from its investment. The ethos underlying the deployment of ALPR in the UK is to deliver the right information to the right people, at the right time, and to deny criminals and terrorists the use of the roads.

Strategic Vision